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## **REMARKS**

### **Pending Claims**

Claims 25-41 have been cancelled without prejudice to filing the subject matter in one or more continuation applications. Thus, claims 6-24 are pending.

Reconsideration and continued examination of the above-identified application are respectfully requested. No search is necessitated by this amendment and no new questions of patentability should arise, since the scope of this subject matter has already been examined by the Examiner. No new matter has been added. Finally this amendment places the application in condition for allowance. Therefore, entry of this amendment is respectfully requested.

### **Rejection of under 35 U.S.C. § 112, First Paragraph**

The Examiner has rejected claims 25-41 as failing to comply with the written description requirement.

In paragraph 3 of the Final Office Action, the Examiner states that the new limitation "with the proviso that fibers are not added in step a)" is new matter since the express exclusion of adding fibers in step a) implies that fibers may be added in steps b) through e), and the Examiner believes there is no support for such scenarios.

While Applicant believes that the express exclusion in claim 25 is fully support by the present specification, in order to advance prosecution, claims 25-41 have been cancelled without prejudice to filing the subject matter in one or more continuation applications, making the rejection of these claims moot. Applicant therefore respectfully requests that this rejection be withdrawn.

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**Rejection of under 35 U.S.C. § 103(a)**

The Examiner has rejected the claims 25-41 as being unpatentable over WO 96/06809 in view of Lentz (U.S. Patent No. 3,122,520). Frank et al. (U.S. Patent No. 5,866,027) is used as a working copy of WO 96/06809.

In paragraph 5 of the Office Action, the Examiner states that WO 96/06809 discloses a process for the preparation of organically modified aerogels comprising the steps of claim 1. The Examiner further states that this reference teaches that a surface-silylating substance is used, whereby surface-modifying substances of the general formula  $R'_nMX_m$  are used to replace original surface groups with inert groups of the type  $MR'_n$ . The Examiner also states that where X is a radical  $-OR''$ , the surface modifying substance is a siloxane.

The Examiner finds that WO 96/06809 lacks the teaching of using a *disiloxane* of the formula of the present claims. However, the Examiner believes that the list of surface-modifying substances that are shown is exemplary and that one skilled in the art would have been motivated to look to the prior art for other surface-modifying substances that may be used in its invention.

For this reason, the Examiner further relies on Lentz, et al. for its teaching of organosilicon compounds that may be used as surface-silylating/modifying substances for a hydrogel compound that is subsequently washed free of water and dried. The Examiner states that Lentz et al. teaches that the organosilicon compounds react with the original surface groups of a hydrogel according to the same reaction and overlap those of WO 96/06809, including the use of trimethylchlorosilane.

The Examiner further states that Lentz et al. also teaches the use of disiloxanes of the claimed formula, including hexaethyldisiloxane and hexamethyldisiloxane. The Examiner therefore concludes that it would have been obvious to one having ordinary skill in the art, seeing WO 96/06809 and Lentz et al. in combination, to have substituted any of the surface-silylating substances of Lentz et al., including hexaethyldisiloxane or hexamethyldisiloxane, as the surface-silylating substance in the invention of WO 96/06809 with the expectation of successful results since WO

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96/06809 and Lentz et al. teach the organosilicon compounds are for the same purpose, are similarly for use in forming aerogels, and react according to the same reaction.

With respect to the new limitation requiring that fibers are not added in step a), the Examiner notes that Frank et al. adds fibers for the purpose of increasing mechanical stability of its xerogel. The Examiner concludes that it would have been obvious for one having ordinary skill in the art to have not added the fibers in Frank et al.'s process of producing a xerogel, with the expectation of a loss in mechanical stability in the final product.

Applicant respectfully disagrees. WO 96/06809 (and Frank et al.), in part, describes a process for preparing fiber-reinforced xerogels. The stated objective is to produce "mechanically stable xerogels", and this is achieved when "fibers are incorporated into the sol in suitable form and amount" (see column 1, line 60 to column 2, line 4). Since, without a step of adding fibers, the stated objective could not be achieved, Applicant believes that one skilled in the art would not be motivated to exclude this element from the invention of WO 96/06809 (and Frank et al.), thereby arriving at the present invention.

However, in order to advance prosecution of this application, claims 25-41 have been cancelled without prejudice to filing the subject matter in one or more continuation applications, making the rejection of these claims moot. Applicant therefore respectfully requests that this rejection be withdrawn.

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**Conclusion**

In view of the foregoing, Applicant believes that this application is considered to be in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would further expedite the prosecution of the subject application, the Examiner is invited to call the undersigned.

Respectfully submitted,



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